

Serial No.: 10/619,242  
Amendment Dated: June 18, 2004  
Reply to Office Action of March 29, 2004

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the above-captioned patent application:

**Listing of Claims:**

1. (Currently Amended) A vapor compression system comprising:  
a single stage compressor having first and second sections connected in parallel with each having a suction inlet and both discharging to a single discharge port for receiving low pressure refrigerant vapor at a first suction inlet and for discharging high pressure vapor;  
a condenser for receiving the high pressure vapor from said discharge port and converting at least a portion thereof to a lower temperature liquid;  
an expansion device for receiving said liquid and expanding it to a lower pressure vapor;  
an evaporator for receiving said lower pressure vapor at a low temperature and delivering it to said first section said compressor at a higher temperature; and  
a subcooler for receiving a portion of said liquid refrigerant from said condenser to subcool another portion of said liquid refrigerant passing from said condenser to said expansion valve, said subcooler being fluidly connected to [[a]] second suction inlet section of said compressor.
2. (Cancelled)
3. (Currently Amended) A compression system as set forth in claim [[2]] 1 wherein said compressor is a multi-cylinder compressor and each of said two sections is driven by separate cylinder groups.
4. (Original) A vapor compression system as set forth in claim 3 wherein one section is driven by a plurality of cylinders and another section is driven by a single cylinder.
5. (Original) A compression system as set forth in claim 4 wherein a circuit containing said subcooler is driven by a single cylinder.

6. (Currently Amended) A compression system as set forth in claim ~~[[2]]~~ 1 and including unloading circuits in at least one section to fluidly interconnect a high pressure side to a low pressure side of said compressor.

7. (Original) A compression system as set forth in claim 1 wherein said subcooler has associated therewith an isolation valve which may be closed to effectively remove the subcooler from operation.

8. (Original) A compression system as set forth in claim 1 and including a subcooler expansion device upstream of said subcooler.

9. (Original) A compression system as set forth in claim 1 and including a check valve posed between said subcooler and said second suction inlet.

10. (Currently Amended) A method of selectively boosting the capacity of a vapor compression system having a single stage compressor, a condenser, an expansion valve and an evaporator comprising the steps of:

providing first and second ~~suction inlets~~ sections to said compressor said first and second sections connected in parallel with each having a suction inlet and both discharging to a single discharge port;

providing a subcooler to receive a first portion of refrigerant from the condenser to cool a second portion of refrigerant from the condenser prior to its flow to the expansion valve; and

providing for the flow of said first portion of refrigerant from said subcooler to said second ~~suction inlet~~ section.

11. (Currently Amended) A method as set forth in claim 10 and including a step of delivering refrigerant from said expansion valve to said first ~~suction inlet~~ section.

12. (Currently Amended) A method as set forth in claim 11 and including the step of applying multiple cylinders to compress the refrigerant being delivered to said first ~~suction inlet~~ section.

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13. (Currently Amended) A method as set forth in claim 13 and including the step of applying a single cylinder of said compressor to compress the refrigerant being delivered to said second ~~suction inlet~~ section.

14. (Currently Amended) A vapor compression system for a refrigerated vehicle, comprising:

a single stage compressor for receiving a low pressure refrigerant vapor and delivering a high pressure refrigerant vapor, said compressor having first and second sections, connected in parallel with each having a suction inlet and both discharging to a single discharge port; ~~each of which is capable of compressing refrigerant vapor;~~

a condenser for receiving refrigerant vapor from said compressor and delivering liquid refrigerant;

an expansion valve for receiving at least a portion of said liquid refrigerant and converting it to a low pressure refrigerant vapor;

an evaporator for receiving low pressure refrigerant vapor from said expansion valve and delivering higher temperature refrigerant vapor to said first ~~compression~~ section; and

a subcooler for receiving a portion of said liquid refrigerant from said condenser to subcool said portion of said liquid refrigerant passing to said expansion valve, said subcooler being fluidly connected to said compressor second section.

15. (Original) A system as set forth in claim 14 wherein said subcooler is connected to selectively provide for the flow of refrigerant to said second section.

16. (Cancelled)

17. (Original) A system as set forth in claim 14 wherein said first section has multiple reciprocating cylinders.

18. (Original) A system as set forth in claim 14 wherein said first section has at least one unloading circuit.

19. (Original) A system as set forth in claim 14 wherein said second section includes a single reciprocating cylinder.